What is claimed is:

1. A method for estimating, by a processor coupled to a call waiting queue, waiting time for a designated call in the call-waiting queue, wherein a plurality of agents handle calls in multiple queues, comprising steps of:

(a) determining the number of calls ahead of the designated call;

(b) determining the historical average call handling time T(h) for calls in the queue;

(c) for each agent handling calls in the queue determining the portion of the agent's time devoted to the queue;

(d) determining an effective number of agents devoted to the queue by summing the time portions over all of the agents; and

(e) multiplying the number of calls ahead from step (a) by the historical call handling time from step (b), and dividing the result by the effective number of agents determined in step (d).

2. The method of claim 1 further adapted to account for abandoned calls by additional steps of (f) determining an abandoned call rate; (g) determining not-abandoned call rate by subtracting the abandoned call rate from integer 1; and (h) multiplying the result of step (e) by the result of step (g).

3. A call routing system comprising:

a switching apparatus for switching calls to a plurality of agent stations;

a computer-telephony integration (CTI) processor coupled to the switching apparatus and adapted to maintain multiple routing queues by a plurality of enterprise rules, wherein agents are assigned to multiple queues; and

an estimating application executing on the CTI processor and adapted for determining an estimated waiting time for a selected call in a selected queue;

wherein the estimating application multiplies the number of calls ahead of the selected call in the selected queue by an historical average call handling time for calls in the queue, and divides the result by an effective number of agents devoted to the queue determined by summing, over all agents serving the queue either full or part time, the portions of each agents time devoted to the selected queue.

4. The call routing system of claim 3 wherein the estimating application further accounts for abandoned calls by determining a non-abandoned call rate from an abandoned call rate and multiplying the estimated call waiting time determined in claim 3 by the result.

5. The call routing system of claim 3 wherein one or more of the call waiting queues are virtual queues.

6. The call routing system of claim 3 wherein one or more of the multiple routing queues are priority queues wherein newly arrived calls may be inserted in the queue by priority ahead of calls already in the queue.

7. A computer telephony integration (CTI) software application, comprising:

a counting function for determining the number of calls ahead of a designated call;

a function for determining the historical average call handling time T(h) for calls waiting in the queue;

a calculation function for retrieving the portion of time each agent assigned to the queue spends in tending to calls in the queue;

a summation function for determining an effective number of agents devoted to the queue by summing the time portions over all of the agents; and

a calculation function for determining the estimated waiting time by multiplying the number of calls ahead from the counting function by the historical call handling time, and dividing the result by the effective number of agents from the summation function.

8. The CTI application of claim 7 further comprising a function for accounting for abandoned calls by determining a non-abandoned call rate from an abandoned call rate and multiplying the estimated call waiting time previously determined by the result.